

60246-142  
9639**REMARKS**

Claims 1-5 and 8 stand rejected under 35 U.S.C. §103(a) as being obvious over Smith (United States Patent No. 3,305,011) in view of They et al (United States Patent No. 4,850,713). Smith discloses a radiator 24 with radiant surfaces 80 and 82 coated with a highly emissive material. As shown in Figure 5, the radiant surfaces 80 and 82 are on the exterior surface of the radiator 24. They discloses the surface oxidation of copper deposits 13c at high temperatures in an oxidation atmosphere, transforming the copper deposits 13c into black copper oxide.

The combination of Smith and They does not disclose or suggest Applicant's claims. Applicant's claims require the step of applying a layer of oxidizable material on both an inner surface and an outer surface of a heat exchanger. As shown in Figure 5 of Smith, the highly emissive material is only applied to the outer surfaces 80 and 82 of the radiator 24. The inner surfaces of the radiator 24 are not disclosed as being coated with the highly emissive material. Neither Smith nor They discloses the step of applying a layer of oxidizable material to both the inner and outer surface of a radiator. If Smith and They were combined, the combination would not disclose or suggest applying oxidizable material on both the inner and outer surfaces of a heat exchanger. Applicant respectfully requests that the rejection be withdrawn.

Thus, claims 1-5 and 21-22 are in condition for allowance. The Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C. \$36.00 for two additional dependent claims. If any additional fees are due, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment.

60246-142  
9639

Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,

**CARLSON, GASKEY & OLDS, P.C.**

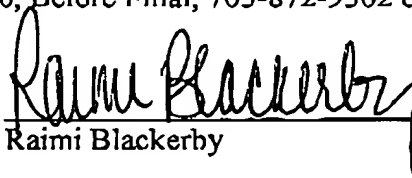


Karin H. Butchko  
Registration No. 45,864  
Attorneys for Applicant  
400 West Maple Road, Suite 350  
Birmingham, Michigan 48009  
(248) 988-8360

Dated: June 18, 2002

**CERTIFICATE OF FACSIMILE**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, TC 3700, Before Final, 703-872-9302 on June 18, 2002.

  
Raimi Blackerby

FAX RECEIVED  
JUN 19 2002  
GROUP 3700

60246-142  
9639**VERSION WITH MARKINGS TO SHOW CHANGES MADE****CLAIMS**

1. (AMENDED) A method for making a heat exchanger of a furnace system comprising the steps of:

applying a layer of an oxidizable material on an inner [a first] surface and an opposing outer surface of said heat exchanger; and

oxidizing said layers [layer] of oxidizable material to form a layer of dark material having a high emissivity on each of said inner surface and said outer surface.

2. (AMENDED) The method as recited in claim 1 wherein the step of applying said layers [layer] of said oxidizable material includes applying said layers [layer] of oxidizable material electrochemically.

3. (AMENDED) The method as recited in claim 1 wherein step of oxidizing said layers [layer] of oxidizable material includes utilizing an oxidizing alkaline solution to oxidize said layers [layer] of oxidizable material.

4. (AMENDED) The method as recited in claim 1 wherein said layers [layer] of oxidizable material are [is] copper.

5. (AMENDED) The method as recited in claim 4 wherein said layers [layer] of oxidizable material are [is] oxidized to cupric oxide.